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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,356	11/18/2003	Robert L. Maier	SP03-036	9870
22928	7590	08/25/2004	EXAMINER	
CORNING INCORPORATED			BOSS, WENDY L	
SP-TI-3-1			ART UNIT	
CORNING, NY 14831			PAPER NUMBER	
			1775	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/718,356	MAIER ET AL.	
	Examiner	Art Unit	
	Wendy Boss	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9 and 12-18 is/are rejected.
- 7) ☒ Claim(s) 7,8,10,11,19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/18/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. The numbering of claims is not in accordance with 37 CFR 1.126. There were two claims numbered 18. The claim 18 following claim 19 has been renumbered 20.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,101,707 (Henry).

Henry discloses a coated optical material for use as an optical path material in lasers comprising a shaped optical monocrystal having an entry face and an exit face, and a coating on at least the exit face of the monocrystal comprising  $\text{MgF}_2$  (see column 1, lines 7-10 and lines 56-59; and column 2, lines 8-18).

4. Claims 1, 2, 4-6, 12, 13 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,403,673 (Haga et al.).

Haga discloses a coated optical material comprising a shaped optical monocrystal having an entry face and an exit face, and a coating on at least the exit face of the monocrystal comprising  $\text{SiN}$  (see column 1, lines 6-11; column 3, lines 4-8; and column 6, lines 1-4). Haga further discloses that the monocrystal may be  $\text{CaF}_2$ , as recited in claim 2. The reference also discloses that the thickness of the coating may be  $0.1 \mu\text{m}$

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(100 nm) (see column 5, lines 26-29), which is within the ranges recited in claims 4-6 and 6-18.

The reference does not necessarily recite that the optical material is for use as an optical path material in lasers operating below 250 nm; however, a recitation of a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

5. Claims 1-3, 9 and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2001/0008540 (Oba et al.).

Oba discloses a coated optical material suitable for use as an optical path material in lasers operating below 250 nm comprising a shaped optical monocrystal having an entry face and an exit face, and a coating on at least the exit face of the monocrystal comprising  $\text{MgF}_2$  (see paragraphs 0002-0006 and 0085). Oba further discloses that the monocrystal is  $\text{CaF}_2$ .

#### ***Allowable Subject Matter***

6. Claims 7, 8, 10, 11, 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or suggest a coated optical material

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comprising a shaped optical monocrystal coated on at least an exit face with fluorine doped fused silica or  $\text{MgF}_2$  doped fused silica.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wendy Boss whose telephone number is 571-272-1534. The examiner works a part-time schedule and can normally be reached on M-Th 5:30a-9:30a.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Wendy Boss